

BULLETIN

OF THE



1925

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BULLETIN
OF THE
Essex County Ornithological Club
OF
Massachusetts



1925

FIFTY CENTS

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BY THE

ESSEX COUNTY ORNITHOLOGICAL CLUB
OF MASSACHUSETTS

Salem, Massachusetts

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1925

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BULLETIN
OF THE
ESSEX COUNTY ORNITHOLOGICAL CLUB
OF MASSACHUSETTS
SALEM, MASSACHUSETTS

ISSUED ANNUALLY

EDITORIAL COMMITTEE

RALPH LAWSON

ARTHUR P. STUBBS

RODMAN A. NICHOLS

S. G. EMILIO

DECEMBER, 1925

SALEM, MASS.

VOLUME VII, No. 1

FOREWARD

ARTHUR P. STUBBS

The year nineteen twenty-five as a whole, was favorable for bird observation. The light snowfall and comparatively mild weather of January, February and March made the woods and fields easily accessible. Much the same conditions prevailed through the following November and December, while no long cold rains or protracted periods of extreme heat were experienced during the remainder of the year.

The mild weather of January and February caused an early northward movement of our winter land visitors but did not hasten the arrival of our early spring birds; these came as usual during the first two weeks of March. Shore-birds and water-fowl were not affected by the weather but migrated at about average dates.

Continued warm weather in March and early April gave promise of a rush of migrants the first of May, but cooler weather ensued and migration dragged, so that northern migrants were noted throughout the month of May. Several species, normally breeding farther north, were found in the county during the breeding season, thereby raising the question if they had not been influenced by weather conditions to remain here and breed.

Favorable weather, throughout the nesting season of our summer resident species, resulted in large numbers of young birds of which a good proportion lived to migrate southward. An autumn with few severe storms prolonged migration and south bound birds were noted well into November.

An early influx of sub-arctic species seemed to foretell an early and probably severe winter, but open and mild weather with little snow, prevailed until Christmas. Open water in many ponds and streams induced many ducks and herons to remain into December. Salt water birds came south at average dates.

THE COURTSHIP OF THE RUDDY DUCK, *Erismatura
jamaicensis*, AND OF THE COOT, *Fulica americana*

CHARLES W. TOWNSEND

The cardinal factors, display, dance and song, are generally to be found in the courtship of birds, but the emphasis is often placed on one or two of these factors and not equally on all three.

In the display, the more brilliant or striking portions of the plumage are exposed to the utmost extent to the view of the courted one. This is well illustrated in the case of the Red-winged Blackbird where the scarlet epaulets, his most treasured charm, appear broad and conspicuous owing to the erection of the scarlet feathers, and these are displayed under the most favorable and dazzling circumstances as the male flies slowly and directly towards the female. Dance may be limited to bobbing or posing or it may be as elaborate as that of the Gannet, while song in the same way may be of a simple and unmelodious nature or as beautiful as the hymn of the Hermit Thrush.

The Ruddy Duck has many brilliant charms to display although I suspect that the superlatively blue bill is treasured as his chiefest, but in dance and song he is neither graceful nor melodious. He begins by swimming vigorously near the object of his choice with tail spread, erected and tipped forward. His beautiful light blue bill stands out conspicuously, and the brilliancy of its coloring makes it appear even larger than it is. It contrasts sharply with his red neck and breast, his puffed out white cheeks and his black cap. He holds his head up and back, bobs or vibrates it rapidly, depressing it meanwhile, and strikes with his bill, first his breast in rapid strokes and then the water in frequent splashes. From time to time he utters his song of love, a snoring rattle, which is followed, as he raises his head, by a curious creaking sound. Again, apparently not content with the splashing made with his bill, he strikes the water vigorously with his wings, then takes a short flight and lands with a prodigious splash close to the female. She may dive, but he at once pursues her under water, and they both come to the surface at the same time. The drakes tail, held erect when he is swimming and showing from behind a round white target in the middle of the shield, is turned downwards in his short flights and drags the water.

When two or more drakes are courting at once, the effect is spectacular in the extreme, but the coy duck, after the manner of her sex, generally appears indifferent or bored.

The Coot, by reason of the location of his display, may be said to be backward in coming forward. In ordinary swimming he often has his tail down and the white in the under tail-coverts does not show or appears as two small white spots. These are also seen in flight. In courtship, however, these white spots are evidently the chief display, for not only is the tail elevated but the whole stern is expanded in an astonishing manner, showing two large white patches. At the same time the wings are raised from the back displaying the white edges of the secondaries. During the display the head is held low and stretched out in front and the bird calls *cuk, cuk, cuk* or *cuk-a, cuk-a, cuk, cuk-a, cuk-a-cuk*. Now as both the white display of the under tail-coverts and of the wings are best seen from behind the pursuing male takes a short flight over the female, drops to the water beyond her and at once displays. The same thing is accomplished at times by the displaying male swinging suddenly around on the water before the female. It is rather awkward for the male to be obliged to turn his back on the object of his desires but his brilliant plumes are in an awkward place.

Sometimes three or four birds display at once and take short flights, landing in the water with a splash made by their feet and the tips of their wings. The pursued may also fly and drop to the water and dive, and the male dives after her. On one occasion the pair were copulating on emergence from the water. On another occasion No. 1 flew over No. 2, dropped to the water and immediately displayed. Whereupon No. 2 displayed and both swam off side by side displaying, but soon subsided. Whether these were both males or No. 1 was a male and No. 2 a female, I do not know. Where the plumage of the sexes is alike it is not uncommon for both to perform the courtship ritual together as, for example, in the case of the Laysan Albatross and the Gannet.

Another case observed was as follows: No. 1 swims calling *cuk-a* after No. 2 who swims fast to avoid him. No. 1 pecks gently at No. 2 who pecks back savagely and utters a harsh *cuk, cuk*. No. 1 swims off, picks up a piece of rush and swims back with it but No. 2 has disappeared. Was not No. 1 a male, No. 2 a female?

IPSWICH RIVER BIRD TRIP

RALPH LAWSON

The nineteenth annual Ipswich River Bird Trip was held on Saturday and Sunday, May 16 and 17, 1925. About thirty-five members and guests were with the party some time during the two days, and about thirty persons camped out Saturday night at Pine Island.

The early spring had been unusually warm and even the last six weeks of winter had shown a considerable accumulation of unseasonable warmth, and were it not for east winds and cold rain storms during late April and early May vegetation would undoubtedly have been far ahead of normal; but as it was, although some trees and plants showed unusual progress, others, notably elms and oaks, were a little backward, so that conditions previous to the trip had been mixed and abnormal. There had also been a considerable deficiency in rainfall since early winter, and the Ipswich River during the trip was as low as, if not lower than, on any previous trip.

The start was made from Middleton Paper Mills shortly after nine o'clock Saturday morning, and Howe Station was reached by the occupants of the three canoes making this part of the trip soon after noon. The main party left Howe Station a little after two o'clock, and all had arrived at Pine Island by seven. The day had been moderately warm with bright sun until late afternoon, when a chill southeast wind made itself felt. A total of eighty-four species were checked during the first day.

Sunday morning early was rainy, but the sun appeared about eight o'clock and all had resumed the trip down river by nine. A departure from our usual custom was made when canoes were instructed to keep right through to Goodhue's Landing in Ipswich without stopping at Hemlock Bend for lunch. This was generally found to be satisfactory, as more time was thereby available for exploring along the river in favorable bird country.

The last stage of the trip from Ipswich to Little Neck and return by Plover Hill was made as usual by motor boat and foot to the old toll gate, from which point an automobile stage carried us back to Ipswich.

A total of nineteen additional species were observed on Sunday.

In looking back over the list we find a splendid number of warblers without, however, any of unusual rarity. Black-throated Blue, Bay-breasted and Blackburnian Warblers were unusually numerous, and many individuals of each of these species were seen. The Pigeon Hawk was a new record for the trips, and a Horned Grebe found in the backwater above Norwood's Mills was also unusual. Greater Yellow-legs were very common and a single bird of this species roosting on the top of a bush about four feet above the water caused both wonder and amusement. The finding of a Rusty Blackbird again this year seems to indicate that this species does not move north as early as usually supposed. The finding of a single American Pipit near Clark's Pond added further interest.

The total list of one hundred and three birds was the second largest ever recorded, and is as follows:

3. Horned Grebe	331. Marsh Hawk
7. Loon	339. Red-shouldered Hawk
51. Herring Gull	357. Pigeon Hawk
133. Black Duck	364. Osprey
144. Wood Duck	387. Yellow-billed Cuckoo
190. American Bittern	388. Black-billed Cuckoo
194. Great Blue Heron	390. Belted Kingfisher
201. Green Heron	393. Hairy Woodpecker
202. Black-crowned Night Heron	394c Downy Woodpecker
212. Virginia Rail	412a Northern Flicker
228. Woodcock	417. Whip-poor-will
242. Least Sandpiper	420. Nighthawk
246. Semipalmated Sandpiper	423. Chimney Swift
254. Greater Yellow-legs	428. Ruby-throated Humming- bird
256. Solitary Sandpiper	444. Kingbird
263. Spotted Sandpiper	452. Crested Flycatcher
270. Black-bellied Plover	456. Phoebe
274. Semipalmated Plover	461. Wood Pewee
300. Ruffed Grouse	467. Least Flycatcher
Ring-necked Pheasant	474b Prairie Horned Lark
316. Mourning Dove	477. Blue Jay

- | | |
|------------------------------|-----------------------------------|
| 488. American Crow | 645. Nashville Warbler |
| 493. Starling | 648a Northern Parula Warbler |
| 494. Bobolink | 652. Yellow Warbler |
| 495. Cowbird | 654. Black-throated Blue Warbler |
| 498. Red-winged Blackbird | 655. Myrtle Warbler |
| 501. Meadowlark | 657. Magnolia Warbler |
| 507. Baltimore Oriole | 659. Chestnut-sided Warbler |
| 509. Rusty Blackbird | 660. Bay-breasted Warbler |
| 511b Bronzed Grackle | 661. Black-poll Warbler |
| 517. Purple Finch | 662. Blackburnian Warbler |
| English Sparrow | 667. Black-throated Green Warbler |
| 529. American Goldfinch | 671. Pine Warbler |
| 540. Vesper Sparrow | 674. Oven-bird |
| 542a Savannah Sparrow | 675. Water-Thrush |
| 558. White-throated Sparrow | 681. Maryland Yellow-throat |
| 560. Chipping Sparrow | 685. Wilson's Warbler |
| 563. Field Sparrow | 686. Canada Warbler |
| 581. Song Sparrow | 687. American Redstart |
| 584. Swamp Sparrow | 697. American Pipit |
| 587. Towhee | 704. Catbird |
| 595. Rose-throated Grosbeak | 705. Brown Thrasher |
| 608. Scarlet Tanager | 724. Short-billed Marsh Wren |
| 612. Cliff Swallow | 725. Long-billed Marsh Wren |
| 613. Barn Swallow | 735. Chickadee |
| 614. Tree Swallow | 756. Veery |
| 616. Bank Swallow | 758a Olive-backed Thrush |
| 619. Cedar Waxwing | 759b Hermit Thrush |
| 624. Red-eyed Vireo | 761. Robin |
| 628. Yellow-throated Vireo | 766. Bluebird |
| 629. Blue-headed Vireo | |
| 636. Black and White Warbler | |
| 642. Golden-winged Warbler | |

In addition to the foregoing, the Wood Thrush, White-crowned Sparrow, Piping Plover, Laughing Gull, American Golden-eye and White-winged Scoter were seen within the County by Club members during these two days.

THE 1925 ESSEX COUNTY SHOOTING SEASON

JOHN C. PHILLIPS

Each New England autumn is different from any other, different in its weather as well as different in its avian visitors. We do not know when mid-September comes what surprises the next month will bring. We may hazard a guess on Grouse and Woodcock, usually wrong by the way, but of the Snipe, Ducks and Geese which we hope soon to see we know practically nothing. Last autumn will be remembered longest perhaps as the season of the cold October with the heavy snow storm on the tenth of the month. By upland shooters all over New England it will pass on to history as the great Woodcock year. In other respects it was not very remarkable.

The Grouse situation was somewhat peculiar. The breeding season in Essex County and southern New Hampshire was especially good as regards weather and as regards the size of broods, while there was, I think, very nearly a normal stock of old birds on hand. To the casual observer all the indications of unusual autumn abundance were present, but those who prowled about a good deal missed the splendid coveys of early summer and by the end of August began to wonder what was going on. There was certainly a rapid loss of young birds after the first of August, (apparently the same thing happened in the late summer of 1924) so that when the season opened on October 20 the Grouse situation was distinctly bad. We had already guessed as much by our findings in Rockingham County, N. H., on October 1, where the Grouse supply was about the same as at home. There were some young birds, but matters did not improve towards the end of the season, which leaves the local situation worse than a year ago. This does not apply all over New England (although Grouse are very scarce now in the north of Maine) for there are areas of comparative abundance west of Manchester and Concord, N. H., in central Massachusetts and in some parts of New York state. However, the whole eastern part of southern New Hampshire, as well as most of the eastern part of Massachusetts, was hard hit by some unknown condition, not necessarily by an *unusual* condition. In our county I would guess that the species was

not over twenty-five to thirty per cent of normal abundance at the end of 1925.

Another year there must be intensive collecting done in summer to find out what happens to the three-fourths grown broods. A bill to make it legal for certain authorized persons to take specimens has been introduced at the present session of the State Legislature and its passage is important if we are to get a complete picture of the life history and diseases of our Grouse. Through the efforts of the New York committee to investigate the periodic cycles of Grouse scarcity and, through our co-operating New England committee, Dr. A. O. Gross of Bowdoin College and Dr. A. A. Allen of Cornell received a great many specimens last autumn which will give us a good picture of the ordinary parasites and their relative abundance. The search for contagious diseases is a much harder problem.

Goshawks were present in some numbers during the whole autumn all over New England and we saw the first at Wenham on September 23. One remained about the lake nearly the whole autumn killing a number of Grouse and at least one Kingfisher. These rapacious birds from the north will not help matters.

This was no doubt a better Pheasant year than we have seen for several years and a good many in the aggregate must have been shot. Dr. E. E. Tyzzer of the Harvard Medical School demonstrated the presence of the worm *Heterakis*, so injurious to turkeys, in specimens which I sent to him.

The Woodcock flight was undoubtedly the best in many years and this held true over a large part of New England. Whether the snow storm on October 10, had some bearing on this I do not know. It may possibly have concentrated the coastal flight or else brought early and late flights along at nearly the same time giving the impression of greater numbers than actually existed. In Essex County some of the best covers are now posted and a large bag is not easy to make. In the ten days during which I hunted Woodcock in Rockingham County, N. H. and Essex County in October 1925, I started just 135 different birds, and on other days, while after Grouse, a few more. Woodcock mostly passed before the first of November, October being such a very cold month, but there were signs of another late flight in southern N. H. between the 16th and 20th of November, although I did not actually see the birds.

Wilson's Snipe were almost at total failure in 1925 and except for the few birds which came in from time to time on the bare shores of Wenham Lake, I saw scarcely a dozen birds. The water table was unusually low in our part of the world in the early part of the summer, following a dry autumn and winter, and as a result the snipe grounds 'grassed up' very early in the summer and there was little ground left for them even after rather abundant rains arrived.

The early shore bird flight was on the whole poor although a good many Lesser Yellow-legs passed along before the opening of the shooting season. The late flight of Black-breasts and Greater Yellow-legs was especially good and at the Lake I am very certain that we never before saw so many of the latter species in any one previous autumn. Killdeer Plover (though not a game bird) were also more numerous than we have ever seen them and we had at one time at least thirty birds around the Lake shore, twenty in one flock.

The flight of ducks started in rather early and I believe we begin to see a slight increase in Blue-winged Teal, judging by various reports and from what I saw on the Penobscott River in Maine, September 16 and 17, 1925. There was rather a good flight of Black Ducks beginning September 21, and continuing for several days and there were some ducks going by all through October. November, however, was a very blank month with mild weather and all water fowl were scarce until the last few days. The severe weather of early December brought along a large flight of geese and some ducks.

To be specific, Green-winged Teal were more plentiful than usual. Pintails did not come in anything like the numbers of 1924, while Mallard and American Widgeon were also rare. Few western breeding ducks of any kind were seen. Among the diving ducks Ring-necks appeared again in small numbers and as I have before remarked appear to be attempting to fill the gap left on the Atlantic coast by the rapid disappearance of the Lesser Scaup. During this past season only eight Lesser Scaup were shot at Wenham and no large flocks were seen. Ruddy Ducks hold about the same although there is said to be a slight increase in New England. Of the other diving ducks Red-head and Canvas back were represented at Wenham by just one specimen each,

while at least four or five of the latter were shot at Chebacco Lake. Golden-eyes were more plentiful than usual and some large flocks gathered in the lake in December.

The goose flight was rather peculiar in its distribution. Instead of there being, as is usually the case, a small October movement followed in mid or late November by a large flight, there was this year quite a continuous migration beginning about October 8, (when we got our first shot at Wenham) to the end of the month, most flocks of geese passing east of Wenham Lake. This appears to have been the largest and most extended October flight of geese we have ever had. On the other hand November was a "wash-out" on geese (and for the most part on ducks) up to November 27th. During the snowy south-easter which started on December 1, a great flight of geese came along, traveling in large flocks and continuing all night and all next day. It was interesting to note that on December 1, all geese, as well as other fowl, were flying from N. W. to S. E., up wind, and not on their usual N. E. to S. W. route. They had apparently gotten too far inland, off their course, and were heading back towards the coast, up wind. Geese flew more or less up to January 2, 1926.

On the Virginia and North Carolina sounds this season appears to have been a very poor one, while on the Potomac River and other Chesapeake waters it was surprisingly good. The salt water which now enters the Back Bay of Virginia direct, since the locks were removed from the Dismal Swamp Canal, has apparently had an adverse effect on the food of wild fowl all along that part of the coast. Such conditions may indirectly affect all the Western ducks which from time to time appear in Essex County.

TWO NEW RESERVATIONS FOR WILD LIFE IN ESSEX COUNTY

LAURENCE B. FLETCHER

Secretary of The Federation of the
Bird Clubs of New England Inc.

The Federation of the Bird Clubs of New England Inc. was organized in 1924 with Edward Howe Forbush as its first President. Dr. T. Gilbert Pearson, President of the National Association of Audubon Societies has now assumed the presidency.

This corporation was formed for the purpose of instructing and educating the public in the ways and customs of all wild life, especially birds, and their conservation, and the accumulating of scientific data from which information may be obtained for the use of future generations by establishing wild life sanctuaries and by means of related agencies calculated to achieve these ends.

It has affiliated with it thirty Bird Clubs, four Audubon Societies, the Appalachian Mountain Club, and the Massachusetts Fish and Game Protective Association.

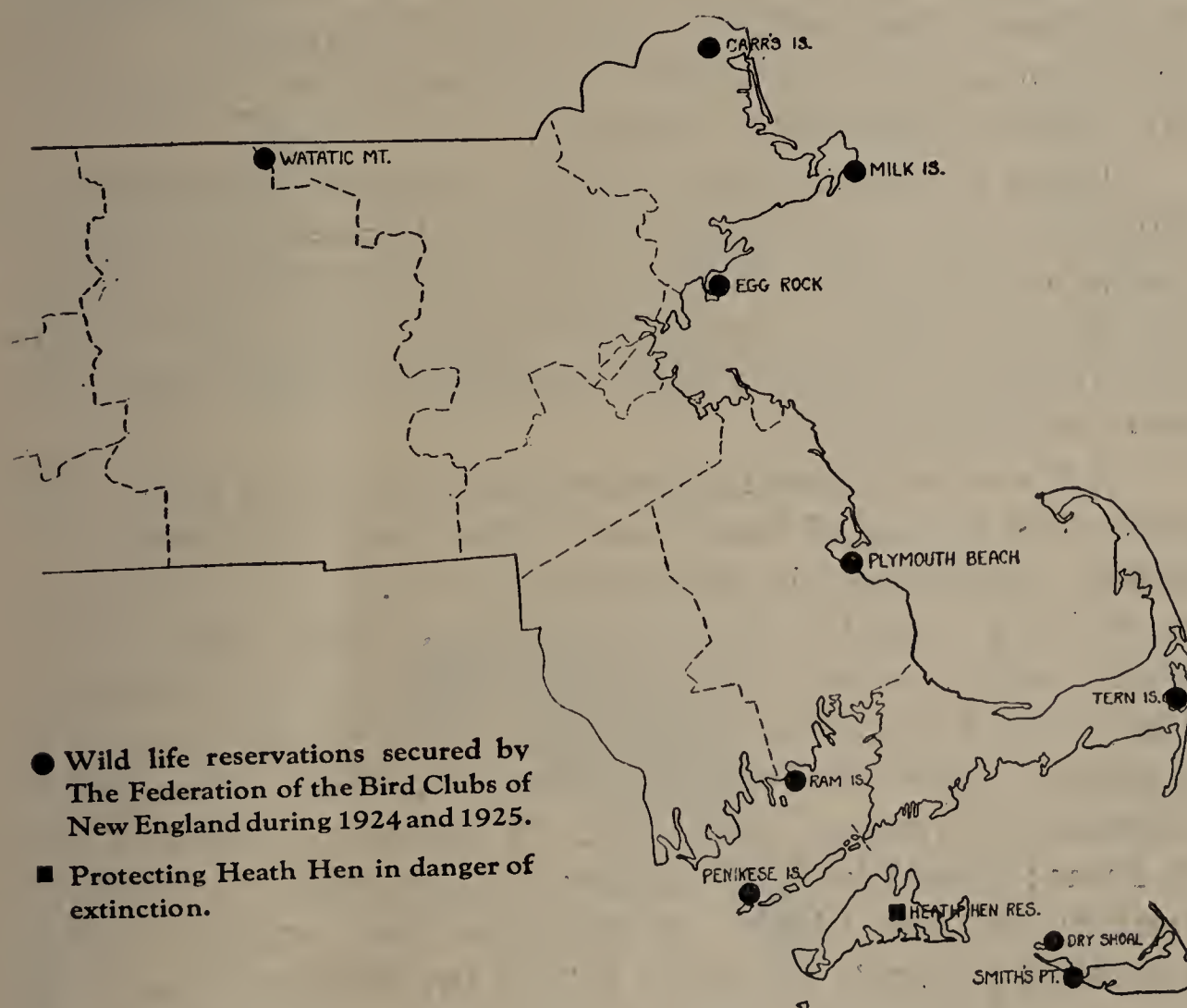
During the years 1924 and 1925, through gift, purchase or legislation, various sanctuaries have been secured and have been, or soon will be, presented to the Commonwealth of Massachusetts by this Federation, two of which are in Essex County. They are as follows:

EGG ROCK: When Lynn was settled, Egg Rock was covered with sea-birds breeding on it, and it derived its name from the abundance of eggs found there, large numbers of eggs being taken by fishermen and others.

Dr. Townsend in his "Birds of Essex County" says,—“Nuttall in 1834 saw thirty or forty pairs of Common Terns breeding annually at Egg Rock off Nahant.” This island is a mass of rocks rising in places 20 or 30 feet above the water, and is of about an acre in extent. Here and there are small patches of pebbles or of coarse grass, but it is for the most part bare. Dr. Townsend says, “On July 19, 1876 I found one hundred or more Common Terns with perhaps some Arctic Terns breeding there. Two years later on again visiting the Rock, two or three pairs were found, but they have since abandoned the place.”

The Government, after using this Rock as a light-house station for many years, gave it up in 1924 and it reverted to the State. In 1925 the Federation drew up a petition requesting that Egg Rock be made a sanctuary by the State. It was signed by the Lynn Bird Club, one of the societies affiliated with the Federation. After some difficulty, and with several minor defeats, the Legislature finally voted to make Egg Rock a wild life reservation in memory of the late Henry Cabot Lodge, and so named. Much of the success in passing this bill was due to the persistent and untiring effort of Senator Osborne of Nahant.

The State expects to remove all buildings from the Rock so that the entire area will be available for breeding purposes. It is confidentially expected that the birds will return to breed and nest on this Rock as in former times now that it is a bird reservation in perpetuity under the management of the Department of Conservation.



MILK ISLAND: Milk Island is a triangular, rocky island of about fifteen acres, situated off Rockport, flanked by ledges

and broken rock thrown up by the storms. It contains a pond of about two acres and includes a marshy area in which grow bull-rushes, elderberries and bayberry bushes. To the southern angle there is a broad surface of broken rock above the reach of the tides, and here it is that the Common Terns breed. The pond is frequented by ducks and other sea-fowl during the fall and spring migration, they using it as a resting place.

In 1905 fifty pairs of Common Terns bred on this island, but they have been driven off by an infestation of rats and snakes. The Department of Conservation will take measures in the spring of 1926 to rid the island of these enemies of the Terns so that it will be made again an inviting breeding area for the three species of Terns which formerly nested there.

This island was secured by the Federation for a nominal sum through the liberality of Mrs. Roger W. Babson of Wellesley Hills, Mass., and it has been presented to the Commonwealth of Massachusetts for a wild life reservation in perpetuity. It is to be known as the Knight Wild Life Reservation in memory of Mrs. Babson's father and mother.

Large no-trespass signs, securely set, have been placed on Milk Island by the Federation, and the local warden will have charge of the locality, making regular visits during the nesting and shooting season. During other seasons, the public will have the privilege of using the island for picnic purposes which they have for years enjoyed.

A few words regarding the accomplishments and plans of the Federation outside of Essex County, Mass. may be of general interest. As indicated in the accompanying map other reservations secured are: Watatic Mountain, in Ashburnham, Mass., Carr's Island, near the mouth of the Merrimac River, off Newburyport; (this is in Essex County) the Shepherd Brooks Estate at West Medford; Plymouth Beach at Plymouth, Mass., the gift of Charles A. Purington; Tern Island, off Chatham, the gift of John B. Paine; Ram Island, off Mattapoissett, purchased by this Federation; Penikese Island, off Buzzards Bay, secured through legislation; Smith's Point, the gift of Dr. William Sturgis Bigelow; and Dry Shoals, taken by right of eminent domain by the State.

In addition to the reservations already mentioned, the

Federation arranged for, or co-operated in, warden protection for breeding and migratory birds at Muskeget Island, Dry Shoal, Monomoy Point, Dead Neck (near Mattapoisett,) Truro, Nauset, Orleans, Jeremey's Point, Billingsgate Island, and Sandwich—all in Massachusetts. It maintained for one year, as a memorial to Ernest Harold Baynes, the bird sanctuary which he founded at Meriden, N. H. It called and conducted a Field Day and Bird Conference at Babson Park, Wellesley Hills, Mass., to interest and stimulate bird lovers and clubs in bird protection. It called and conducted a hearing at the State House where plans were made for a final attempt to save the Heath Hen from extinction. This includes the employment of a warden who is devoting the greater part of his effort to the control of enemies of the Heath Hen. The Massachusetts Fish and Game Protective Association is working in close co-operation with this Federation, particularly in saving the Heath Hen. Officers of the Massachusetts Audubon Society are on the Heath Hen Committee, and liberal subscriptions have come from that Society. Officers of the Federation delivered 25 free lectures on bird life, to increase interest in its conservation work. The future work of the Federation will include the other New England States in which it expects to become actively engaged in attempting to have the Affiliated Clubs in their respective areas secure reservations through the help of the Federation, which will act as headquarters for assistance and information along the lines of conservation and bird protection.



ANNOTATED LIST OF BIRDS
OBSERVED IN ESSEX COUNTY MASSACHUSETTS
DURING THE YEAR 1925

ARTHUR P. STUBBS

The original data from which the following list has been compiled is on file with the Club Recorder and is available to interested persons on application to him.

A. O. U.

2. Holboell's Grebe. March 22; December 20. Infrequent during both of its seasonal periods of 1925.
3. Horned Grebe. May 17; October 25. Present in usual numbers.
6. Pied-billed Grebe. September 30 to October 11. None reported in spring; not numerous during the fall.
7. Common Loon. May 24; July 28. Present in usual numbers.
11. Red-throated Loon. April 16; September 23. Common after first fall date.
27. Black Guillemot. February 7 and 8. Rarer than usual.
31. Brünnich's Murre. February 8. Very rare this year.
32. Dovekie. February 23; December 6. Uncommon this year.
36. Pomarine Jaegar. September 2. Only one record for the year.
37. Parasitic Jaeger. September 7. The only one reported.
40. Kittiwake. February 7; October 28. Most common during the fall and early part of the winter.
43. Iceland Gull. February 8; December 20. Very rare this year.
47. Great Black-backed Gull. Present throughout the year. Somewhat common.
51. Herring Gull. Present throughout the year. Very common.
58. Laughing Gull. May 14 to September 16. Becoming common about Lynn Harbor during the warmer months.
60. Bonaparte's Gull. July 31 to December 13. Variably common.

70. Common Tern. May 23 to October 25. Present in usual numbers.
71. Arctic Tern. July 29 to October 16. Present in usual numbers.
72. Roseate Tern. July 23 to October 16. Not so many reported as in 1924.
77. Black Tern. August 27. Only one reported.
117. Gannet. April 25 to May 24; September 2 to October 12. Most common off Ipswich.
119. Cormorant. March 22; December 16. Most common about Salem Harbor.
120. Double-crested Cormorant. May 23; September 2 to October 12. Present in large numbers during the fall.
129. Merganser. November 1 to December 6. No spring dates and no large numbers during the fall.
130. Red-breasted Merganser. Present throughout the year. Seen occasionally during the summer.
131. Hooded Merganser. October 30 to December 2. Several birds about Suntaug Lake, staying until driven out by the ice.
132. Mallard. October 12. An unmistakably wild bird shot at Wenham Lake.
133. Red-legged Black Duck. March 26; September 24. The large raft of Black Ducks that winter off Little Nahant, in Lynn Harbor, are supposed to be mostly of this species. There were several hundred there in late December this year.
- 133a. Black Duck. Probably present with the above pack in winter. Breeds locally in some numbers.
135. Gadwall. October 22.
137. Baldpate. October 9. One record from the Ipswich region.
139. Green-winged Teal. September 2 to November 4. Several records.
140. Blue-winged Teal. September 16. One record from Wenham Lake.
143. Pintail. April 8; October 14. The last seen, in the spring, of the little group of Pintails at Hall's Brook, was on March 10, until two males were seen there on October 22. They were there until the end of the year. On December 10 a female had joined the two males.

144. Wood Duck. March 10 to November 8. Quite a number of this species were reported along the Ipswich River valley.
146. Redhead. October 26. One record from Wenham Lake.
147. Canvas-back. October 30 and December 22. Earlier date from Wenham Lake ; later from Chebacco Pond.
148. Scaup. March 12; October 13. The Scaup passed the early months of 1925 at their station beyond the "Gas House" at Lynn, in large numbers. The early fall date is from Wenham Lake.
149. Lesser Scaup. October 1 to November 6. Records from Wenham Lake and Suntaug.
150. Ring-necked Duck. October 8 and 26. Records from Wenham Lake.
151. American Golden-eye. May 17; October 23. Present in usual numbers.
152. Barrow's Golden-eye. March 26; December 13. This species is maintaining its old station off Sliding Rock, Lynn, having returned there early in December. Up to date of writing there are two fully plumaged males and a retinue of a dozen or more in female plumage, a part of which have yellow bills.
153. Buffle-head. April 23; November 5. Apparently increasing in numbers and spreading along shore in both directions from their old feeding station near Little Nahant.
154. Old-Squaw. May 7; November 16. Present in good numbers.
160. Eider. November 7. Single record from Salem Harbor.
163. Scoter. May 7; September 20. An uncommon species.
165. White-winged Scoter. May 31; June 28, July 28-29, September 2. Evidently summered in the County in small numbers. Present in good numbers the remainder of the year especially during spring and fall.
166. Surf Scoter. May 31; July 28, October 2. Above remarks apply also to this species.
167. Ruddy Duck. October 17 to November 2. An uncommon species.

172. Canada Goose. March 29 to April 8 ; October 8 to December 24. Fall migration was heavy and long continued with frequent instances of northward movements.
190. Bittern. April 4 to October 12. Most common along the Ipswich River.
194. Great Blue Heron. April 12 to May 17; July 26 to December 17. The late record was made at Forest River, Salem.
196. Egret. August 16 and 27. Records made in Wenham Swamp.
200. Little Blue Heron. (May 21 ?); July 24 to October 13. While the 1925 flight of Little Blues did not reach the magnitude of that of 1924, birds were reported from several localities from mid-summer well into the fall. The May record is of a small white plumaged heron seen in Wenham Swamp at such a distance as to make positive identification impossible.
201. Green Heron. April 27 to September 9. Apparently not so common as in previous years.
202. Black-crowned Night Heron. April 12 to November 7. Not decreasing in numbers.
212. Virginia Rail. May 16. This species appears to be neglected by our observers and as it is little sought by gunners in our region we have little data of the presence of a comparatively common species.
214. Sora. April 20 to June 15. The remarks about the above species doubtless apply equally well to this one.
221. Coot. October 11 and 20. Another case of sad neglect.
228. Woodcock. March 18 to November 20. Noted as usual along East Street, Middleton.
230. Wilson's Snipe. March 29 to October 25. Much interesting study of this species was made, during the "drumming" season, by several members along East Street, Middleton.
231. Dowitcher. May 24; July 29 to September 2. Clark's Pond, Ipswich, especially at high tide, is a very favorable place for the study of this species during the fall migration.
234. Knot. July 29 to September 23. More common in the fall of 1925 than for some years.

235. Purple Sandpiper. March 22; November 7. Viewed at very close range on Great Pig Rocks off Marblehead by a party of Club members and guests February 8, 1925. Present in large numbers on the outlying ledges of Salem Harbor during the closing months of 1925.
239. Pectoral Sandpiper. July 23 to October 12. Good sized flocks reported from the neighborhood of Newburyport.
240. White-rumped Sandpiper. September 2 to October 12. Few reported.
242. Least Sandpiper. May 10 to 31; July 12 to September 9. Present in usual numbers.
- 243a. Red-backed Sandpiper. September 30 to October 28. Somewhat common during October.
246. Semipalmated Sandpiper. May 10 to 31; July 23 to October 12. Present in good numbers.
248. Sanderling. May 24 to 31; July 23 to November 5. Very common.
254. Greater Yellow-legs. April 18 to June 23; July 29 to October 14. Rather a good flight spring and fall.
255. Yellow-legs. May 10 to 24; July 26 to October 10. No large numbers reported.
256. Solitary Sandpiper. May 10 to 17; July 26 to October 12. Present in usual numbers.
258. Willet. May 10. Only one record.
261. Upland Plover. July 26 to August 26. Only a few reported.
262. Buff-breasted Sandpiper. August 27. A single bird seen at Clark's Pond, Ipswich.
263. Spotted Sandpiper. May 10 to September 27. The above dates indicate a shorter season than this species really stays with us—more neglect on the part of our observers.
265. Hudsonian Curlew. July 23 to October 11. One seen at Nahant Beach for several days was very tame.
270. Black-bellied Plover. May 23-24; August 17 to November 5. Fairly good fall flight.
272. Golden Plover. May 23-24; August 27 to October 12. More reported in 1925 than for several years previous.
273. Killdeer. March 11 to November 8. Now a well established breeding species in Essex County.
274. Semipalmated Plover. May 17 to 28; July 23 to October 12. Present in usual numbers.

277. Piping Plover. April 28 to September 30. Reported to be increasing in numbers locally.
- 283a. Ruddy Turnstone. July 28 to October 4. By no means numerous this year.
289. Bob White. Resident species. A few reported.
300. Ruffed Grouse. Resident species. Some numbers left in spite of gunners and disease.
- Ringed-necked Pheasant. Introduced resident species. Gunners report fair numbers bagged during the 1925 shooting season.
316. Mourning Dove. Wintered and present up to September 30. Apparently bred in same numbers this year.
331. Marsh Hawk. Wintered and present on October 16. Fairly common species.
332. Sharp-shinned Hawk. Resident species. Less common than usual.
333. Cooper's Hawk. Resident species. Few reported.
334. Goshawk. September 23 to December 12. Uncommon.
337. Red-tailed Hawk. August 27 to October 12. Few reported.
339. Red-shouldered Hawk. Resident species. Fairly common.
342. Swainson's Hawk. April 5. A single bird in normal plumage seen in Salem "Pastures" region. See page 41.
343. Broad-winged Hawk. September 25. Very uncommon summer resident.
- 356a. Duck Hawk. August 27 and September 2. Only two reported.
357. Pigeon Hawk. April 1 to May 17; September 7 to October 11. Uncommon migrant.
360. Sparrow Hawk. Resident species. Present in usual numbers.
364. Osprey. April 12 to October 26. Present all summer but we have no record of its nesting.
366. Long-eared Owl. Resident species. Only one reported.
367. Short-eared Owl. December 4. One record—Danvers.
368. Barred Owl. Resident species. Few reported.
373. Screech Owl. Resident species. Few reported.
375. Great Horned Owl. Resident species. Frequently heard near the Club Camp in Boxford.
376. Snowy Owl. January. One bird only reported—Plum Island.

387. Yellow-billed Cuckoo. May 14 to August 15. Apparently more numerous in 1925 than for several years previous.
388. Black-billed Cuckoo. May 16 to August 12. Little change in numbers from last year.
390. Belted Kingfisher. March 21 to November 2. Present in usual numbers.
393. Hairy Woodpecker. Resident species. Becoming nearly as common in towns, about fruit and shade trees, as its relative the Downy.
- 394c. Downy Woodpecker. Resident species. Common.
400. Arctic Three-toed Woodpecker. October 7 to December 31. October 7-8 at Lynn; October 18 at Boxford; November 1 and 8 at Peabody; November 8-10-15 at North Andover; November 15 at Lynn; November 20 at Topsfield; December 31 at Lynn. Four of the above individuals were females.
401. Three-toed Woodpecker. October 23. One male near Ingalls' Crossing, Middleton. See page 36.
402. Yellow-bellied Sapsucker. October 1-7. Very few reported.
406. Red-headed Woodpecker. July 11-13. Salem Golf Links.
- 412a. Northern Flicker. Resident species. Present in usual numbers.
417. Whip-poor-will. April 30 to September. Locally common.
420. Nighthawk. May 16 to September 2. No large flights reported.
423. Chimney Swift. May 5 to September 10. About usual numbers.
428. Ruby-throated Hummingbird. May 16 to September 17. Fast becoming a rare species in our section.
444. Kingbird. May 10 to September 10. Usual numbers.
452. Crested Flycatcher. May 17 to October 1. New late date.
456. Phoebe. March 21 to October 22. Common.
459. Olive-sided Flycatcher. August 12. One bird, characteristically perched on a dead limb overhanging the Ipswich River.
461. Wood Pewee. May 17 to September 9. About usual numbers.
467. Least Flycatcher. May 2 to August 16. Locally common.
474. Horned Lark. March 27; October 4. Locally common.

- 474b. Prairie Horned Lark. May 16 to October 7. Slowly increasing in numbers locally.
477. Blue Jay. Resident species. Now a common bird of the town especially in winter.
488. Crow. Resident species. Present in usual numbers.
493. Starling. Introduced resident species. Rapidly increasing in numbers.
494. Bobolink. May 10 to September 14. Locally common.
495. Cowbird. Wintered—March 23 to October 11. Fairly common.
498. Red-winged Blackbird. March 6 to August 16. Locally common.
501. Meadowlark. Resident species. Locally common in summer; a few winter in favorable localities.
507. Baltimore Oriole. May 5 to September 6. Reports from several localities indicate that Orioles in many instances, this summer, remained near their nesting sites after the young birds were out of the nest instead of leaving for the woods and berry pastures as is their usual practice.
509. Rusty Blackbird. March 11 to May 16; September 20 to November 15. Smaller numbers noted than usual.
- 511b. Bronzed Grackle. Wintered—March 11 to December 9. Increasing in numbers and becoming a pest in many localities.
517. Purple Finch. Resident species. No large flocks reported and rather a poor showing for the year as a whole.
- English Sparrow. Introduced resident species. Apparently barely holding its own; surely not increasing in numbers.
521. Crossbill. January 26. Only one record.
528. Redpoll. January 25; October 29. Very few reported.
529. Goldfinch. Resident species. Variably common.
533. Pine Siskin. February 9; September 20. Rare in the early part of the year but fairly common during the latter part.
534. Snow Bunting. February 1; October 28. In much the same status as the Pine Siskin.
536. Lapland Longspur. October 4-28. Rarely seen in numbers except at Ipswich and there near the sea.
540. Vesper Sparrow. April 4 to November 1. Locally common.

541. Ipswich Sparrow. January 1; October 4. Rare even at Ipswich.
- 542a. Savannah Sparrow. January 21; March 27 to November 1. Locally common.
549. Sharp-tailed Sparrow. May 24 to July 29. Few reported.
- 549a. Acadian Sharp-tailed Sparrow. October 4-25. Recorded from Ipswich.
554. White-crowned Sparrow. May 12; October 11 to 16. Several October records.
558. White-throated Sparrow. Wintered—April 13 to May 17; (July 15, Topsfield); September 20 to December 27. If thorough canvass of the higher grounds were made it would probably be found that White-throated Sparrows breed regularly in Essex County, and as it quite commonly winters here, its status would then be proven to be that of a permanent resident.
559. Tree Sparrow. April 21; October 23. Rather scanty flights.
560. Chipping Sparrow. April 12 to November 14. Present in usual numbers.
563. Field Sparrow. April 10 to November 8. Locally common.
567. Slate-colored Junco. May 29; September 24. Variably common.
581. Song Sparrow. Resident species. Very common in summer; uncommon in winter.
584. Swamp Sparrow. Wintered—April 6 to December 27. During migrations this species may often be found far from swamps, its natural habitat in breeding time.
585. Fox Sparrow. March 15 to April 5; October 25 to December 10. No large flights this year.
587. Towhee. April 26 to October 18. Present in usual numbers.
595. Rose-breasted Grosbeak. May 10 to October 4. Fairly good numbers. New late date.
598. Indigo Bunting. May 24 to September 13. Decidedly uncommon this year.
608. Scarlet Tanager. May 15 to September 13. Present in usual numbers.
612. Cliff Swallow. May 9 to July 26. The colony on the Fletcher barn near the East Street Bridge passed a successful breeding season this year.

613. Barn Swallow. April 23 to September 16. Present in usual numbers.
614. Tree Swallow. March 22 to September 2. On the latter date Tree Swallows were present in hundreds at Clark's Pond and Plum Island, being with very few exceptions the only swallow to be seen.
616. Bank Swallow. May 17 to August 27. One colony reported in West Peabody.
619. Cedar Waxwing. Resident species. Variably common.
621. Northern Shrike. February 2; November 5. Decidedly uncommon this year.
624. Red-eyed Vireo. May 16 to October 29. Usual numbers.
627. Warbling Vireo. May 8 to September 8. Only locally common.
628. Yellow-throated Vireo. May 13 to September 13. An uncommon bird this year.
629. Blue-headed Vireo. May 8 to October 12. Summer resident about Club Camp.
636. Black and White Warbler. May 1 to October 12. Common and well distributed about mixed growth woodlands.
642. Golden-winged Warbler. May 11 to September 30. Locally common.
645. Nashville Warbler. May 3 to October 12. Somewhat common locally.
647. Tennessee Warbler. May 18-31. Very few reported.
- 648a. Northern Parula Warbler. May 7-31; September 29 to October 16. Very few reported during the fall migration.
650. Cape May Warbler. September 6 and 13. Two records each by a different observer.
652. Yellow Warbler. May 2 to September 20. Very common.
654. Black-throated Blue Warbler. May 10-31; October 11. By no means common this year.
655. Myrtle Warbler. May 31; September 9. Common in small flights.
657. Magnolia Warbler. May 13 to 31. About usual numbers in spring but none reported during the fall.
659. Chestnut-sided Warbler. May 3 to August 30. Common and well distributed in brush lands.

660. Bay-breasted Warbler. May 17-31; July 31. Very few individuals seen. The July date is remarkable. It was of a male in full plumage. There is a possibility of its having bred.
661. Black-poll Warbler. May 17 to June 1; August 30 to October 27. Most common in the fall migration.
662. Blackburnian Warbler. May 10 to 31; June 21; August 12. Comparatively few reported.
667. Black-throated Green Warbler. April 26 to October 12. Present in usual numbers.
671. Pine Warbler. April 10 to October 2. Locally common.
672. Palm Warbler. April 6; October 9-12. Very few reported.
- 672a. Yellow Palm Warbler. April 10 to May 10; October 2 to November 2. Present in average numbers.
673. Prairie Warbler. May 10 to 30. This species was surely neglected by our observers.
674. Ovenbird. May 5 to October 1. Common in woodlands.
675. Water-Thrush. May 4-31; September 23. Uncommon this year.
678. Connecticut Warbler. October 2 and 4. Two birds seen.
681. Maryland Yellow-throat. May 7 to October 2. Usual numbers present.
683. Yellow-breasted Chat. June 30. A single bird seen at Ipswich.
685. Wilson's Warbler. May 13 to 31. Few reported.
686. Canada Warbler. May 14 to 31; June 18, 21, 22; July 2, 15, 31; August 7-9, 13, 16, 23. Although no nests were found, the above succession of dates seems to indicate that this species may have bred here in 1925.
687. Redstart. May 3 to September 27. Present in usual numbers.
697. Pipit. May 17; September 30 to November 1. Comparatively few records.
704. Catbird. May 2 to October 12. Present in usual numbers.
705. Brown Thrasher. April 26 to October 11. Present in usual numbers.
718. Carolina Wren. December 24-25. At one station by two observers. One bird on first and two birds on second date. See page 39.
721. House Wren. May 10. Rare this year.

- 722. Winter Wren. May 16; November 8. Several reported.
- 724. Short-billed Marsh Wren. May 10 to August 16. Locally common.
- 725. Long-billed Marsh Wren. May 10 to August 16. Locally common.
- 726. Brown Creeper. April 12; August 12. Somewhat common.
- 727. White-breasted Nuthatch. September 10. Common during fall and early winter.
- 728. Red-breasted Nuthatch. August 30. Not so common as 727 but seen well into December.
- 735. Chickadee. Resident species. Present in usual numbers.
- 748. Golden-crowned Kinglet. April 19; September 27. Not numerous.
- 749. Ruby-crowned Kinglet. April 12 to 27; October 2 to 22. Not numerous.
- 751. Blue-gray Gnatcatcher. May 1 and 2. A single bird seen upon first date and collected on the second. Mounted specimen is now in the Peabody Museum, Salem.
- 755. Wood Thrush. May 10 to September 22. Fairly common locally.
- 756. Veery. May 9 to August 27. Locally common.
- 758a. Olive-backed Thrush. May 13 to 17; September 23. Very few reported.
- 759b. Hermit Thrush. Wintered and remained until November 1. Nearly a full year record.
- 761. Robin. Resident species. Large numbers throughout the year.
- 766. Bluebird. Wintered and remained until December 6, establishing a twelve months record.

BIRD BANDING RESULTS FOR 1925

WILLIS H. ROPES

The number of birds banded in Essex County at the home stations of members of this Club in 1925 was much smaller than the preceding year, due to a number of causes.

Owing to the moderate temperature and light fall of snow in the winter of 1924-1925, the winter birds, especially the Tree Sparrow did not go to feeding stations and traps, the previous report giving 162 Tree Sparrows versus 43 banded at the same four stations in 1925, the larger part of which were taken in December, 1925. The writer banded only 6 Tree Sparrows in the winter of 1924-1925.

The spring flight of Song Sparrows was very light in this vicinity, the fall flight nearly as bad, and confined to August as far as numbers were concerned, and a co-operative trip to the Ipswich River, near the Club Camp, September 2 to 7 inclusive 1924, which netted 113 birds mainly Song Sparrows was not repeated in 1925. 413 Song Sparrows were reported to Washington as banded in 1924 by four members against 230 in 1925.

Arthur Morley of Swampscott reports only 10 Fox Sparrows against 48 in 1924, and at the three Danvers stations of Charles H. Preston, S. Gilbert Emilio and Willis H. Ropes not a single Fox Sparrow was captured in 1925.

Mr. Morley in his fine location on a hill, with the ocean in sight and acres of scrub growth and bog between, as usual has secured unusual birds, viz; 63 White-throated, 4 White-crowned and 1 Henslow sparrows and 5 Towhees.

Mr. Preston with old growth hard woods nearby, reports the only climbers banded by Club members in the County, 3 White-breasted Nuthatches, 7 Downy Woodpeckers and 1 Brown Creeper, also 10 Barn Swallows and several broods of nestlings. Of Barn Swallows banded by him in 1923, four returned in 1924, but not in 1925, and two others which were not recaptured in 1924, returned in 1925.

As heretofore, this report does not include the work of non-resident members of Essex County, notably Mr. Charles L. Whittle, vice-president and Mr. Laurence B. Fletcher, Secretary of

the N. E. Bird Banding Association, whose extensive operations at Cohasset and elsewhere have been reported by them on many occasions in printed form and in illustrated lectures.

Two expeditions to band the young of Black-crowned Night Herons were carried out successfully. One led by Mr. Fletcher, banded 1500 in the nests at the heronry at Barnstable, Mass. Our fellow-member, Mr. Robert Means, assisted in this trip and of the birds banded by him, five have been heard from; at Nashua, N. H., Mashpee, Mass., Proctor, Vermont, Monroe, New York, and Narragansett Bay, R. I. On the other trip, Messrs. Emilio, Morley and Stockbridge banded 264 young birds at the Ipswich heronry.

The experience of different banders with varied conditions and methods suggest many queries. The question is often asked "Are birds frightened when caught and handled." Undoubtedly they all are the first time they are caught, but it depends very much on the species and the individual bird. Some show fright, some act as if they were mad clean through and some species are very quiet, notably Chipping and Tree Sparrows. Many Song Sparrows, probably the males, are very pugnacious and Chickadees generally peck viciously. Some birds never repeat, whether from fear, or because they fly off with a flock, is hard to decide. Certainly many birds do not object strongly to being caught, when they "repeat" dozens of times and their "bumps of locality" must be unusually developed when they return to the same spot year after year, after long migrations.

The three Danvers bird banders, living only two miles from each other in a triangle have banded nearly two thousand birds in three years and it is very remarkable that neither one has ever caught in that time a single bird at their home stations which either of the others has banded.

Many bird banders have an opportunity to trap only on week ends and holidays. Some have maintained that birds are more readily caught when the traps are left open for days with plenty of food for them to feed on, and the results are better than if the traps are watched and gathered from daily, when birds are seen in the traps. Undoubtedly birds will be tamer if they are trapped only once a week, but they feed and go along, especially if in flocks and do not return every day to the same spot to feed.

By occasional trapping, many birds, and most important of all *the returns* might be missed.

Mr. Morley's experience of trapping flocks of unusual birds during migration, such as Fox, White-throated and White-crowned Sparrows might seem to show that small birds follow the shore line during migration and keep the ocean in sight when they make stops to feed and rest.

It is hoped that before another year other members of the Club will have obtained permits from the United States Biological Survey and Massachusetts Fish and Game Commission and have good results to add to the next annual report and that those members who have permits and have from lack of time or other reasons banded no birds, will find opportunity to use them and have reports to make.

Below is given a table showing the numbers of each species and the total number banded at the four most active stations in 1925.

SPECIES BANDED	BANDING OPERATIONS BY			
	<i>Ropes</i>	<i>Morley</i>	<i>Preston</i>	<i>Emilio</i>
Black-crowned Night Heron	19	109	...	70
Downy Woodpecker	...	...	7	...
Northern Flicker	21	...	...	...
Phoebe	13	...	4	...
Blue Jay	4	1	...	...
Starling	11	8	...	...
Baltimore Oriole	6	...	...	...
Purple Finch	6	...	...	...
White-crowned Sparrow	...	4	...	...
White-throated Sparrow	...	63	...	...
Tree Sparrow	11	23	7	2
Chipping Sparrow	33	5	3	...
Slate-colored Junco	73	7	34	...
Song Sparrow	54	55	58	64
Fox Sparrow	...	10	...	...
Towhee	1	5	...	...
Barn Swallow	...	...	18	...
Tree Swallow	2	...	...	...
Yellow Warbler	3	...	...	...

	<i>Ropes</i>	<i>Morley</i>	<i>Preston</i>	<i>Emilio</i>
Catbird	22	3	7	1
Brown Thrasher	2	...	...	...
White-breasted Nuthatch	...	...	3	...
Chickadee	17	...	19	...
Robin	17	6	1	...
Bluebird	16	1	8	9

Ten additional species were banded by the four banders, only one individual of each species being secured. This brings the total of all birds banded by these four men to 954, and 77 returns of birds banded by them in previous years were taken.



SHORE BIRD MIGRATION OF 1925

WILLIAM R. M. TORTAT

To many—perhaps the great majority of sportsmen who go forth in the fall with gun in hand—each passing season is just another period which has come and gone in which the law says they may match their skill against the birds as they make their annual pilgrimage to warmer climes. The close of the season means the hanging up of the guns, etc., and unless there have been one or two days in which the gunner had particularly good luck the hunting period is soon forgotten in the daily grind of life, except that perhaps there may be some anticipation of what a year hence may bring forth.

To the real bird lovers—we who visit the shores day after day with nothing more than a diary, a pencil, a keen eye and a good pair of binoculars to detect some feathered stranger, or to study more closely the habits of those birds frequently with us, there comes a feeling of satisfaction, a thrill, which lingers during the long winter months. And many pleasant hours are spent with our ornithological friends as we compare our notes and tell of what we have seen, or hear of what we had missed on those few days we had not visited our favorite haunts.

My diary has been my constant companion for several years, and the hours of pleasure which have been mine from poring over its contents have been many. Unfortunately, however, this year I must content myself with living those days of last fall over again without the aid of my faithful little book, due to the fact that on returning home from one especially pleasant outing last November I discovered my note book missing—dropped from my pocket, I believe, while I sat in a small blind on the Salisbury marsh watching flock after flock of geese fly overhead.

All together, I believe the numbers of shore birds seen in this vicinity during the past season were less than in some years past. With few exceptions, notably Greater Yellow-legs, this will not apply. Large numbers of these were seen on the Ipswich, Rowley, Salisbury and Lynn marshes. I believe the American Golden Plover visited us in their usual numbers and on several occasions I enjoyed watching large numbers of these birds. The

Black-bellied Plover were seen in goodly numbers in Salisbury and Rowley. Early in the season I noted hundreds of Knots and Turnstones on Little Neck, in Ipswich. They were flying with flocks of Black-bellied Plover and I spent an entire Saturday afternoon enjoying them. The numbers of Wilson Snipe, and Hudsonian Curlew, that came under my observation were few. Some observers have told me, however, of seeing fairly large numbers of the former, though I believe they were quite scattered.

Early in the season, just previous to September 16, I saw one or two large flocks of Blue-winged Teal at Ipswich and I made note later on of a few White-winged Scooters at the same place. Only one Golden-eye, a female, was seen, near a small body of water in South Peabody—Sidney's Pond. On two occasions I discovered twenty or more Green-winged Teal at the "Dishful" in West Peabody. Black Duck in goodly numbers were seen in nearly all places visited, and about Thanksgiving I saw thousands of Canada Geese winging their way South. On two or three occasions it was reported to me that flocks of these birds had lighted in the ponds hereabouts. In Middleton lake several flocks stopped for periods of from a few hours to two or three days, and in some of the small ponds and water holes of West Peabody it was reported that several birds had been seen. Suntaug pond in Lynnfield, as usual, was a favorite resting place for thousands of Black Ducks, where they seemed to sense the fact that they were in no danger from sportsmen.

There may have been some few other shore birds which I have seen, but without my diary I cannot recall them. I have tried not to exaggerate in any instance the numbers of birds seen, or have I tried to keep within any small area. My wanderings took me from Salisbury to the Lynn marshes, and on nearly every visit to the shore there were some few birds to attract my interest. Perhaps next year I shall attach a small chain to my little diary and let it hang from my neck in the same fashion that my binoculars are suspended by a strap. In this way I shall assure myself that the book will always return home with me and I shall have something else than my memory to recall the numbers and species of birds seen.



AMERICAN THREE-TOED WOODPECKER

GEORGE R. FELT

About noon of October 23, 1925 when Mr. Edward F. Pierce of Peabody, Massachusetts and the writer were out hunting we saw a male American Three-toed Woodpecker in the vicinity of Ingalls Crossing. Numerous large pines had been cut (and taken away) and there were a number of brush heaps. Adjoining were many standing pines also a wooded area which had been somewhat burned.

We were at a standstill when we noticed the eagerness the dogs were paying to something in a sizeable pile of brush and the following instant the young dog made a partial point and a black and white bird, seemingly came from the brush heap and alighted thereon.

At first sight I thought it to be either Hairy or Downy Woodpecker and at once tried to see if the outer tail feathers were spotted. Before I could see the markings of the outer tail feathers I realized there was very little white on the wings and back and generally the bird seemed darker, and for a moment I wondered if Hairy or Downy ever changed plumage. When I did see the black spots in the outer tail feathers, they were very prominent and impressed me vividly.

Mr. Pierce called attention to the yellow on the crown which I had not noticed, and I then realized it was a species I had never seen before and remarked that we must study it carefully, which we did while it tarried. When my attention was called to the yellow on the crown, the bird was facing us—the sunshine bringing out the lustre of its plumage.

While we were observing the bird it was very alert, possibly being somewhat excited from its recent experience, or may be its noon-time-rest had been disturbed. It pried off a little bark from one of the branches on top of the pile—seemingly more from nervousness than hunger, as it did not appear to find anything edible. The bird was in full view for a minute more or less before flying to a smallish tree in the left foreground where we saw it very plainly for a short time.

The yellow crown patch of this woodpecker indicated that it must be one or the other of the three-toed species and a male. The black spots so carefully observed in the white outer tail feathers serve definitely to identify the bird as the Three-toed Woodpecker (*Picoides americanus americanus*.)

I have been able to confirm this identification in two ways, first by studying in the field a few days later the Arctic Three-toed Woodpecker, (*Picoides arcticus*) with its *solid black* back and *unspotted white* outer tail feathers, and second by examining two specimens of *americanus* at the Boston Society of Natural History. One of the specimens showed the black markings in the outer tail feathers plainly, identically the same as the live bird and the back appeared darker than the impression I received at the time of seeing the bird in the woods.

ANOTHER SPRING RECORD OF THE LESSER YELLOW-LEGS

S. G. EMILIO

Spring records of the Lesser Yellow-legs in Essex County, Massachusetts, are rare. The species normally migrates northward through the Mississippi valley, but a few seem to stray to or along the Atlantic coast.

May 10, 1925 I paddled down the Ipswich River into the Wenham-Topsfield swamp. Just northeast of "Pine Island" I

found a bird of the Lesser species with several Greater Yellow-legs. My notes read: "Examine at leisure and for a few moments it paused in direct line with a Greater which was further away, making *very* evident the much smaller size of the nearer bird. When first seen, however, with no other bird in the field of view, it was clearly (to me) a Lesser by reason of the finer head and proportionately shorter bill. I could not at any time see the characteristic 'hair-like' legs. In the air and to a distance of perhaps 175 yards the smaller size was evident, also the quicker wing-beat and the weaker note. The bird left the bunch of Greater Yellow-legs with which it flushed and returned first to the ground."

We continued a little way down stream and stopped again, when my son had no difficulty in picking out the smaller bird at much greater distance than I had been examining it. At this time we saw the two species within three feet of one another, and assuming the larger bird to have a bill two inches long we agreed that the smaller had a bill length close to an inch and a third. Returning up stream three hours later there were two Lesser Yellow-legs at this place. They seemed more nervous and "teetered" more than the Greater.

AN AMUSING EXPERIENCE WITH A WHIP-POOR-WILL

ARTHUR P. STUBBS

A mysterious box awaited me at the store when I went on duty. Being cautioned to open it carefully, I did so, finding a speckled brown bird which was very much alive. Its peculiar mouth with only a vestige of a bill and the general make up of the bird proclaimed it a goat-sucker, which at first sight I took for a Nighthawk, but finding no white bars on the wings and that there were large white patches in the tail, I awoke to the fact that for the first time in my life I was holding a live Whip-poor-will in my hands. After looking the bird over carefully, I took it to the back yard to set it free. I placed it on the top of a truck, out of the way of possible cats until it should come to. It "came to" very quickly, for hardly were my hands off the bird when it sprang into the air, sailing high over the nearby houses

in the direction of the nearest woods which happened to be those of the Fay estate.

Later in the day, Captain George Nichols of the Lynn Fire Department, the captor of the Whip-poor-will, came in to tell his story. It appears that he was riding in his auto down Washington Street, in the neighborhood of the Lynn Post Office, about 10 P. M., when something struck him a smart blow on the side of his head and then fell beside him on the seat. He picked the object up and found it to be some strange bird which appeared to be stunned. He took it to the Fire House and showed it to some of his firemen friends but no one could name it so he placed it a box, as it had begun to show signs of life, and next morning brought it to the store for identification, not finding me he left it until I should arrive, and so I came in contact with the mysterious box and its contents. The bird was captured May 5, 1925.

A NINETEEN TWENTY-FIVE RECORD OF THE CAROLINA WREN

ARTHUR P. STUBBS

Allie Graves' Swamp fills a little pocket between three low hills near the border of the Fay Estate, Lynn. It is little over an acre in extent and is crowded with button-bush, black alder, privet andromeda and other water loving shrubs. The surrounding hillsides are covered with brush and scattering trees. Along two sides of the swamp are narrow footpaths. The brush beside these paths is interlaced and over-run with a vigorous growth of cat-brier. A more perfect bird refuge would be hard to find. It was here that Moulton found his wintering Catbird in 1921.

While passing along one of these paths, on December 24, 1925, my attention was attracted to a little bunch of birds in some small trees, a few steps up the hillside. Working into the brush, I found a pair of Downy Woodpeckers, several Chickadees and then as a little bundle of brown feathers crept around the trunk of a cedar I made mental note—"a Winter Wren!" Before I could confirm my snap identification the whole company of birds drifted down hill to the edge of the swamp. Following as fast as the tangled scrub would permit, I regained the path and at

once heard coming from the mass of briers a decidedly wrennish call. Soon the bird hopped into sight and posed long enough for me to note a wren, longer than either a Winter or a House Wren, with the top of its head and its back a warm brown, throat whitish and with a well defined whitish line over the eye. The bird also had a noticeably long bill.

Some fifteen years ago I had the good fortune to see a Carolina Wren several times, and I noted the resemblance of this wren to that bird, but felt that this bird was smaller. It soon flew across an opening in the trees and was lost to sight in the brush. My endeavors to find it again were unsuccessful.

On reaching home I telephoned to Mr. W. D. Moon, and suggested that he try to see the wren. The following morning he visited the swamp during the beginning of a snow storm and at almost the exact point where I saw the wren disappear found *two wrens* which he was able to watch at close range for several minutes. He noted the points which I recorded and also that the bill was as long as the head from front to back, and that the sides of the breast were bronzy in tint.

We studied manuals and color plates at once but reserved our decision until we saw some skins of the Carolina Wren at the Peabody Museum, during the next meeting of the Club. As the principal point in doubt, size, was settled by study of these skins, the length of a Carolina being less than I thought. We called our birds Carolina Wrens and this identification was confirmed by the fact that our birds did not have the markings of either Long-billed or Bewick's Wrens, species which might possibly have been in this region at this time of year.

BLUE-GRAY GNATCHER

WILBUR D. MOON

Nineteen-hundred and twenty-five to me, was an epochal year in bird observation. The most important event occurred May 1st. I was on Flag Staff Hill, formerly a part of the Fay Estate in Lynn, near my home, looking for new Warbler arrivals and my attention was called to a small bird flitting about in the low bushes very actively and apparently with Warbler characteristics. Although it moved about rapidly, I was able to get several close views. I knew that I had never seen the species before.

A new "Blue Warbler" came into my mind. This was of a Friday, 11 A. M. I returned home with the one thing on my mind. What was it I saw? The Warbler lists contained no such bird.

That evening I telephoned to Mr. S. G. Emilio of Danvers and requested that he come over the next day. We met by agreement Saturday morning at 6 o'clock, and in a few minutes we were on Flag Staff Hill, and had located the bird not more than twenty-five feet from where I saw it the day before. Mr. Emilio, having a collector's permit, secured the bird and we soon decided that we had in hand a Blue-gray Gnatcatcher, a southern bird and a very rare visitor in this part of the country. There are only a few records of this species being seen in Massachusetts in fifty years, and less in Essex County. The specimen was mounted and is now in the Peabody Museum in Salem.

A SWAINSON'S HAWK

S. G. EMILIO

April 5, 1925 I was hunting birds with a glass in Highland Park, Salem, Mass. My notes record that—"a Sparrow Hawk and a Red-shouldered were seen near 'Egret Pool'. Soon after a large dark hawk, apparently a buteo, came momentarily into view. It was clearly neither a Red-shouldered nor a Red-tailed Hawk, and I supposed it *might* be a Rough-legged. Presently the Crows began to chase it and drove the bird fairly close to me in plain view. It was a large buteo and I failed to see the wrist spot characteristic of the Rough-leg. Above, this bird was a rather uniform blackish brown, with some lighter margins showing in places. As the bird receded down the wind I obtained a good view of the tail. It was slaty with *numerous* darker bars. There was no trace of the white upper coverts of the Rough-legged Hawk."

This bird was a Swainson's Hawk. The following day I saw in the Peabody Museum, at Salem, a skin of this species in normal plumage which appeared to me exactly similar to the bird I saw in the field.

The Swainson's has a very strong tendency to melanism. In

this dark phase it is almost impossible in the field to distinguish it from other large *buteos* in similar dark plumage. But the bird I saw in Highland Park was in *normal* plumage, and we are not at all concerned with the theoretical or practical difficulties of identifying the species under any other circumstances. The size, the shape, the uniformly dark upper parts and the wholly characteristic finely barred tail, give a combination attributable to no other North American hawk.

A LATE OCURRENCE OF THE SANDHILL CRANE IN ESSEX COUNTY

ARTHUR P. STUBB

Such records as we have of the occurrence of the Sandhill Crane in Essex County, or even in the state at large, are so ancient and indefinite that the following notes may be of interest.

Mr. Charles H. Sargent of Jackson Street, Lynn, in a recent conversation with the writer, told of shooting a Sandhill Crane at Suntaug Lake, Lynnfield, in late September 1889. He was passing along the westerly side of the lake when he flushed a large bird from the water's edge. He fired and the bird fell into the water and drifted ashore. On examination it proved to be a species he had never before seen and he was in doubt as to its being of sufficient value to take home but finally decided to do so. On his way he met a gunner friend, Clement Chase, who having gunned in the West and being familiar with the species, told Sargent that his bird was a Sandhill Crane and was fine eating, better than goose. Nearing home Mr. Sargent met another friend, John Haskell, who had also gunned in the West and who confirmed Chase's identification. Unfortunately neither man impressed on Mr. Sargent's mind the rarity of his capture and consequently the bird was eaten and the skin destroyed instead of having it mounted as he declares he would have done had he realized its importance.

Mr. Sargent is a gunner of wide experience in eastern Massachusetts and southern New Hampshire and is well known as a man of reliability and conservative statement by a large circle of friends.

Eaton in his "Birds of New York" gives a few records of the occurrence of the Sandhill Crane in New York during the eighteen-eighties and Forbush in his recently published "Birds of Massachusetts" gives a record of one shot at Lovell's Pond, Wakefield, N. H. in 1896 or 1897, and of another shot at Lunenburg, Vt., date not given. These are the only late records the writer has been able to find published for the northeastern states.

RILLS FROM A BIRD BATH

WILLARD B. PORTER

Had Nathaniel Hawthorne, Salem's immortal romancer, been the possessor of a bird bath, future generations might have had quite as much pleasure reading "Rills from a Bird Bath," from the pen of that author, as his "Rills from the Old Town Pump," for there are few greater sources for inspiration or better opportunities for studying the almost human characteristics of these little feathered friends of mankind, than at such a "lavatory."

For instance; a Yellow-billed Cuckoo came to our bird bath, but ere he could begin his ablutions, a Bronzed Grackle alighted and seemingly resenting the presence of the former, started to drive him away. The Cuckoo, however, evidently decided that "first come, first served" and that "possession is nine points of the law," were pretty good rules to follow, promptly assumed a defensive attitude.

Extending his wings at right angles to his body, elevating and spreading his tail (for all the world like a "drumming" partridge) and with head thrust forward and wide open bill, he faced the Grackle, a veritable terror in aspect, calculated to make his advisory quail.

It had the desired effect, for the Grackle, after making several feints, darting toward the Cuckoo but being careful to keep out of striking distance of the latter's long, sharp bill, finally decided that "discretion was the better part of valor" and with seeming indifference, flew off in the opposite direction.

Suddenly, however, he swung around in an arc and swooped down like a hawk at the Cuckoo from the rear and had not the latter, seeing himself thus outwitted, promptly "beat it," the

Grackle would have landed on the Cuckoo's back. Having thus accomplished his object, through strategy where frontal attack had failed, the Grackle proceeded to disport himself in the bath, the Cuckoo in disgusted silence watched the proceeding from a nearby tree.

His bath completed, the Grackle flew off and almost immediately the Cuckoo took possession and without further delay, proceeded to enjoy a swim. I use "swim" advisedly, for that just describes this Cuckoo's movements. Instead of standing in the shallow water at the edge of the bath and splattering with his wings, he literally "dove" through the water, from one side of the bath to the other. Not that he was submerged, but rather that he skimmed through the water, from side to side, four times in rapid succession.

Whether this is characteristic of all cuckoos in bathing, or was simply a happening with this particular bird, deponent sayeth not, for this was the only cuckoo I ever saw taking a bath and so far as this one individual is concerned, it was the last bath he ever had to which I can testify from personal observation.

"Rills from a Bird Bath" are by no means confined to the summer time. An amusing incident occurred the morning of the first freeze this last fall. A Starling, accustomed to bathe there, started to alight in the water which was just skimmed over with a thin coating of ice and, having evidently forgotten to "put his chains on," he literally "skidded" across that glare of ice to the other side. I suppose a real, honest-to-goodness ornithologist might question the reliability of my observation were I to say that that Starling wore the most surprised look I ever saw on a bird's countenance—but he did, just the same.

That birds, if given the opportunity, will bathe in winter with as much evident enjoyment as in summer, has been proven to my satisfaction, for upon melting with warm water the ice in the bird bath one day when the thermometer was 20 degrees, within twenty minutes the bath was literally full of Starlings, English Sparrows and one Junco, while a White-breasted Nuthatch came and drank at the same time, but did not enter the water. The day although cold, was clear and sunny and the birds splattered around in the water apparently with as much enjoyment as in summer.

THE GREAT BLACK-BACKED GULL AT IPSWICH

S. G. EMILIO

The lone Black-backed Gull is a familiar sight along the coast in fall and winter. On two occasions however I have found this bird in such numbers as to be noteworthy.

July 24, 1923 at Castle Neck, or Ipswich Beach as it is better known—to quote from my record—"I proceeded south-eastward along the beach flushed a Piping Plover and later found two more adults, one a perfect belted, and two grown young. At some distance saw several Black-backed Gulls on the beach. They flew at once. Came in sight again and perceived there were many of this species, and very wild, for they again moved along, so I took to the dunes for shelter and stalked them. Eventually near the south eastern end of the beach I got a fairly good chance to view them, but at some distance, the nearest being 350 yards or more away. At this time I counted the astonishing (to me) total of thirty-two adult Black-backs and at least as many more in mottled plumage. There were two large groups and I saw no Herring Gulls within these groups, but where the Black-backs were scattered there was a mingling with the Herrings. Mottled birds that might possibly have been young Herring Gulls I did not count, and there is no doubt in my mind there were well over sixty-five Great Black-backs on the beach."

This observation was of interest to me because it was by far the largest number of this species I had ever seen together. Other observers had seen equal or greater numbers there in the "late summer," but the date is decidedly early to be termed "late summer," and I wondered at the time if the gulls had made an unusually early movement southward on account of the great amount of smoke from forest fires which prevailed in Maine and New Brunswick just then.

September 30, 1925, I was again at Ipswich beach. "I soon came to a bunch of gulls in which there were many Black-backs. Twenty-seven adults of this species flew northward to sea at my approach, the rest went south-eastward along the beach. When I arrived at the mouth of the Essex River I again counted the gulls from a high dune. In this vicinity there were over 80

adults of the species, and returning, near the lighthouse, I found over twenty, thus satisfying myself that the first bunch of 27 had not moved southward and been counted in the 80 seen there. There were then, close to 110 adult Great Black-backs. I made no attempt to count or estimate the number of the immature birds of which there were very many."

It is probable the number of the young birds equalled the number of the adults, in which case the total approximated 200 birds. This is well in excess of any number I have ever heard of as having been seen and may point to an increase of the species along this coast.

On both occasions a powerful telescope was used in counting the birds and there is no error due to the inclusion of Herring Gulls which may have appeared dark to the naked eye on account of unfavorable light.



CALENDAR FOR 1925
OF THE ESSEX COUNTY ORNITHOLOGICAL CLUB
OF MASSACHUSETTS

JANUARY 12. Regular meeting. Nine members present. Voted to maintain a regular schedule of field meetings during 1925. General field notes and discussion.

FEBRUARY 9. Regular meeting. Twelve members present. Voted that all members subscribe for Club Bulletin, thus abolishing free list within the membership. Field notes and general discussion.

MARCH 9. Regular meeting. Fifteen members present. Field notes.

MARCH 23. Regular meeting. Eighteen members present. Speaker of the evening Arthur A. Osborne, a Club member, told of a recent trip to Florida. Pictures and maps shown by aid of the lantern. Some 80 species observed. Field notes.

APRIL 13. Regular meeting. Seventeen members present. The Secretary told of a recent trip to New Orleans, Mobile, Macon and Savannah, showing pictures. Field notes.

APRIL 20. Special meeting to take the place of the second April meeting in order to hear Dr. Phillips talk on a recent trip to equatorial Africa. Twenty-three members present. Dr. Phillips' talk profusely illustrated with pictures. Field notes and general discussion.

MAY 11. Regular meeting. Twenty members present. The speaker of the evening, Professor Alfred O. Gross, gave an illustrated talk on the life history of the Ruffed Grouse. Field notes.

MAY 25. Regular meeting. Eleven members present. Ipswich River Trip of May 16 and 17 reviewed and discussed. Field notes.

JUNE 25. Regular meeting. Seventeen members present. The speaker of the evening Dr. Townsend, gave an account of his recent winter's trip to the Pacific Coast by way of Grand Canyon. Field notes and general discussion.

SEPTEMBER 14. Regular meeting Eleven members present. General discussion of summer records, and field notes.

OCTOBER 26. Regular meeting. Fifteen members present. Speaker of the evening Mr. Morley, who told of a trip to Florida during February, 1925.

NOVEMBER 9. Regular meeting. Eleven members present. Voted to publish a Bulletin covering 1925. Field notes and general discussion.

NOVEMBER 23. Special meeting called for the purpose of seeing moving pictures taken on and about the Heath Hen reservation on Martha's Vineyard and of bird banding operations at the Night Heron colony at Barnstable. Pictures shown through the kindness of Mr. Fletcher. Twenty-one members present.

DECEMBER 14. Regular meeting. Annual meeting of the Club. Officers for the year 1926 elected. Records of the occurrence of the Arctic Three-toed Woodpecker in Essex County read by the Secretary. Thirteen members present.



LIST OF MEMBERS OF THE
ESSEX COUNTY ORNITHOLOGICAL CLUB
OF MASSACHUSETTS

Bates, Walter E.	279 Essex Street, Lynn
Beckford, Arthur W.	10 Park Street, Danvers
Benson, Frank W.	14 Chestnut Street, Salem
Benson, George E.	14 Chestnut Street, Salem
Bosson, Campbell	19 Brewster Street, Cambridge
Brown, Everett B.	86 Grove Street, Lynn
Bruley, Roger S.	64 Center Street, Danvers
Bryan, G. W.	Y. M. C. A. Salem
Bushby, Fred W.	17 Washington Street, Peabody
Chase, Charles E.	31 Euclid Avenue, Lynn
Clark, W. Hobart	163 Hobart Street, Danvers
Cogswell, L. W.	Y. M. C. A., Salem
Cushing, Milton L.	Box 374, Fitchburg
Doolittle, Albert W.	Middleton
Dwyer, Elmer F.	34 Maple Street, Lynn
Emilio, S. Gilbert	156 Hobart Street, Danvers
Felt, George R.	71 Main Street, Peabody
Fletcher, Laurence B.	54 Cotswold Road, Brookline
Fowler, Albert B.	111 Locust Street, Danvers
Gifford, Lawrence W.	63 Federal Street, Salem
Gifford, Morris P.	63 Federal Street, Salem
Goodale, Loring B.	1 Pope's Lane, Danvers
Griffin, Bertram S.	Box 17, West Newbury
Hubon, William P.	25 Flint Street, Salem
Ingraham, Phocion J.	235 Lowell Street, Peabody
Jeffrey, Thomas B.	Salem Willows
Jones, Gardner M.	Public Library, Salem
Kelley, Mark E.	52 Sutton Street, Peabody
Lawson, Ralph	88 Washington Square, Salem
Little, Philip	10 Chestnut Street, Salem
Long, Harry V.	260 Clarendon Street, Boston
Lord, J. Anderson	13 Ash Street, Danvers

Mackintosh, Richards B.	109 Central Street, Peabody
McNeill, David C.	33 Beckford Street, Beverly
McNeill, Ralph H.	14 Mason Street, Beverly
Means, Robert W.	19 Pearl Street, Boston
Means, W. Gordon	108 Water Street, Boston
Moon, Wilbur D.	46 Maple Street, Lynn
Morley, Arthur	26 Minerva Street, Swampscott
Morrison, Alva	35 Congress Street, Boston
Morse, Albert P.	Peabody Museum, Salem
Morse, Frank E.	162 Boylston Street, Boston
Newhall, Milo A.	12 Temple Court, Salem
Nichols, Rodman A.	27 Broad Street, Salem
Osborne, Arthur A.	183 Lowell Street, Peabody
Phelan, Joseph C.	16 Pierce Road, Lynn
Phillips, Dr. John C.	Wenham
Porter, Willard B.	5 Lee Street, Salem
Preston, Charles H.	42 Preston Street, Danvers
Preston, Charles P.	42 Preston Street, Danvers
Proctor, George N.	35 Congress Street, Boston
Robinson, John	18 Summer Street, Salem
Ropes, Willis H.	252 Locust Street, Danvers
Sanders, Richard D.	Asbury Road, Hamilton
Sears, Judge George B.	37 Cherry Street, Danvers
Smith, Fred A.	420 Maple Street, Danvers
Spofford, Charles A.	23 Elm Street, Danvers
Stockbridge, David L.	112 Center Street, Danvers
Stubbs, Arthur P.	14 Fiske Avenue, Lynn
Taylor, Arthur W.	24 1-2 Briggs Street, Salem
Teel, George M.	50 Pickering Street, Danvers
Tenney, Ward M.	60 East Street, Ipswich
Tortat, W. R. M.	6 Perkins Street, Peabody
Townsend, Dr. Charles W.	Argilla Road, Ipswich
Walcott, Robert	152 Brattle Street, Cambridge
Whitney, Charles F.	29 Pine Street, Danvers
Whittle, Charles L.	50 Congress Street, Boston
Wilkinson, Robert H.	Hamilton

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Brown, C. Emerson	1829 Green Street, Philadelphia, Pa.
Cousins, Willard C.	8 Sargent Street, Hanover, N. H.
Donaldson, Major George C.	Ft. Leavenworth, Kansas
Moulton, Charles E.	R. D. 6 Belfast, Maine
Spalding, Frederick P.	43 Nesmith Street, Lowell, Mass.

In Memoriam

FRANK F. NEWELL
WALTER G. FANNING
EDWARD S. MORSE

**PUBLICATIONS of the
ESSEX COUNTY ORNITHOLOGICAL CLUB**

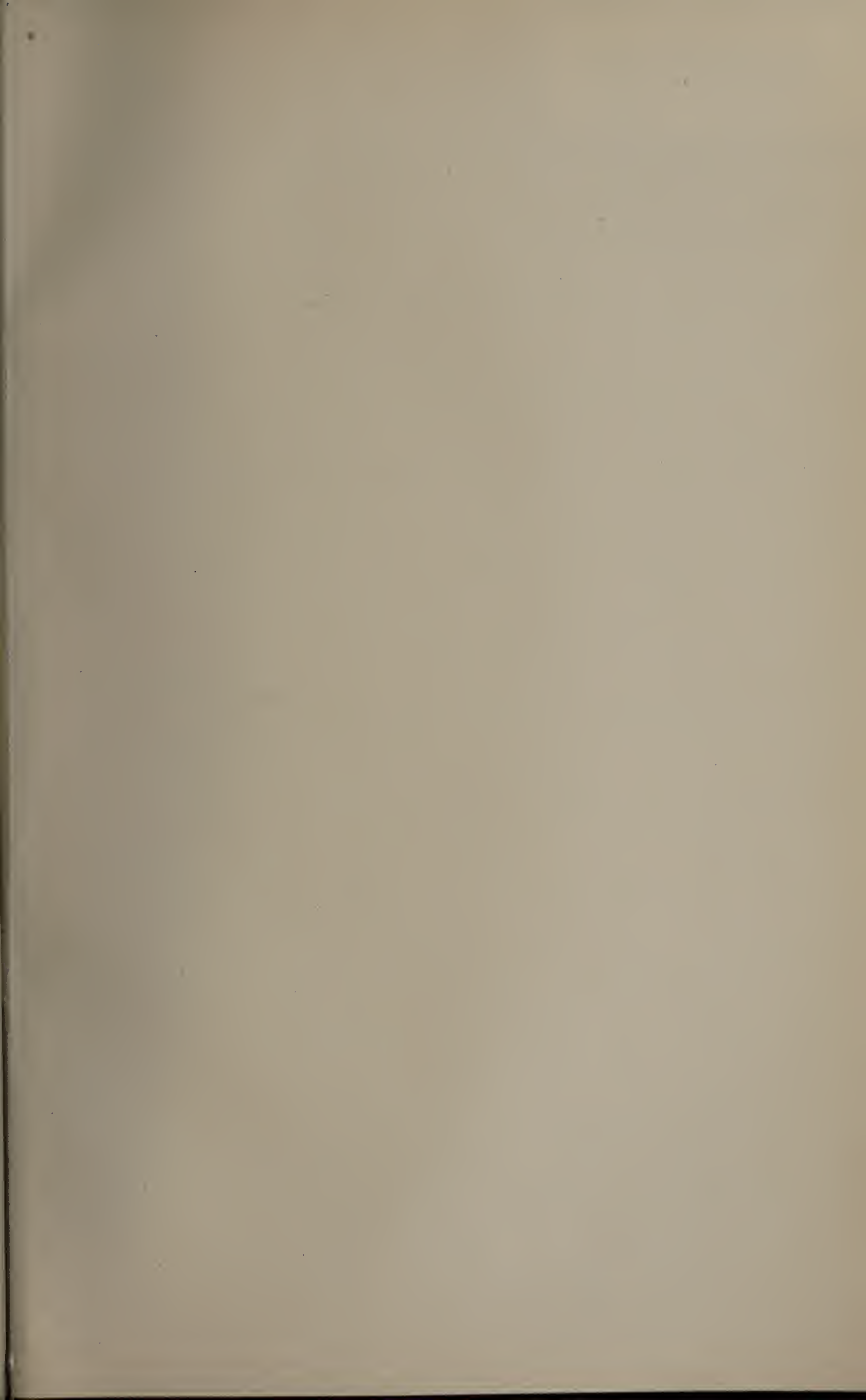
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Check List of the Birds of Essex County - Price 10 Cents
Revised Check List - Price 25 Cents

The above may be obtained from Ralph Lawson, Secretary,
88 Washington Square, Salem, Mass.

Send Checks or Money Orders Payable to Ralph Lawson, Secretary

TABLE I			
Summary of the results of the experiments			
Experiment	Time (min)	Temperature (°C)	Yield (%)
1	10	100	85
2	20	100	88
3	30	100	90
4	40	100	92
5	50	100	93
6	60	100	94
7	70	100	95
8	80	100	96
9	90	100	97
10	100	100	98
11	110	100	99
12	120	100	100
13	130	100	100
14	140	100	100
15	150	100	100
16	160	100	100
17	170	100	100
18	180	100	100
19	190	100	100
20	200	100	100
21	210	100	100
22	220	100	100
23	230	100	100
24	240	100	100
25	250	100	100
26	260	100	100
27	270	100	100
28	280	100	100
29	290	100	100
30	300	100	100
31	310	100	100
32	320	100	100
33	330	100	100
34	340	100	100
35	350	100	100
36	360	100	100
37	370	100	100
38	380	100	100
39	390	100	100
40	400	100	100
41	410	100	100
42	420	100	100
43	430	100	100
44	440	100	100
45	450	100	100
46	460	100	100
47	470	100	100
48	480	100	100
49	490	100	100
50	500	100	100
51	510	100	100
52	520	100	100
53	530	100	100
54	540	100	100
55	550	100	100
56	560	100	100
57	570	100	100
58	580	100	100
59	590	100	100
60	600	100	100
61	610	100	100
62	620	100	100
63	630	100	100
64	640	100	100
65	650	100	100
66	660	100	100
67	670	100	100
68	680	100	100
69	690	100	100
70	700	100	100
71	710	100	100
72	720	100	100
73	730	100	100
74	740	100	100
75	750	100	100
76	760	100	100
77	770	100	100
78	780	100	100
79	790	100	100
80	800	100	100
81	810	100	100
82	820	100	100
83	830	100	100
84	840	100	100
85	850	100	100
86	860	100	100
87	870	100	100
88	880	100	100
89	890	100	100
90	900	100	100
91	910	100	100
92	920	100	100
93	930	100	100
94	940	100	100
95	950	100	100
96	960	100	100
97	970	100	100
98	980	100	100
99	990	100	100
100	1000	100	100





Phillips Library



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